

Date: Sat, 29 Jan 94 22:38:25 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #88
To: Info-Hams

Info-Hams Digest Sat, 29 Jan 94 Volume 94 : Issue 88

Today's Topics:

CW filters and DSP-9 (2 msgs)
FCC: Whats taking so long?????
 FCC form 610-V (2 msgs)
 htx-202 or dj-162 ?

Is portable radio use possible in remote wilderness areas?

Is there a faq list for GMRS?
Need info on CCW

Of Wouff Hongs and Royal Rites (2 msgs)
QST Article on Balloon Tracking using GPS Rcvr
RAMSEY FX TRANSCEIVER
Sideband Technology Inc.
Where is FAQ on EMF?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>

Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 28 Jan 94 09:46:49 GMT

From: usc!howland.reston.ans.net!pipex!uknet!uos-ee!ee.surrey.ac.uk!

M.Willis@network.ucsd.edu

Subject: CW filters and DSP-9

To: info-hams@ucsd.edu

In article <CK95Mz.Krt@srgenprp.sr.hp.com>, alanb@srgenprp.sr.hp.com (Alan Bloom) writes:
|> Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:
|> : wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:
|>
|> : >Kein{nen Paul wrote:

|>
|> : >Can someone with a great deal more technical knowledge than I have
|> : >state just what is the minimum usable bandwidth for a 10-20 WPM CW
|> : >signal, and how much audible ringing is truly inescapable?
|>
|> : I assume that G is an average-size letter in Morse and the
|> : transmission is at 120 wpm (2 characters/s). ...
|>
|> 120 wpm is 2 WORDS per second, or about 10 characters per second.
|>
|> In my previous posting, I analyzed the required bandwidth based on
|> a ringing fall-off rate of three time constants during the "off"
|> time between dits and dahs. Ignacy's method of looking at the
|> frequency content of the baseband signal (i.e. the keying rate)
|> is also valid.
|>
|> The highest pulse repetition frequency is when you are sending a
|> string of dits (for example, the letter H or the number 5.)
|> My previous example of 48 wpm results in 20 dots per second.
|> A Morse code signal can be considered to be an AM (amplitude
|> modulated) signal that is 100% modulated with a square wave, in
|> this case a 20 Hz square wave. Since an AM signal has two sidebands,
|> the bandwidth must be at least 40 Hz.

I suppose that is one way of looking at it. Another is to assume morse is simply made up of dots, followed either by a space or another dot, giving all the combinations necessary. The highest frequency signal is the error, 8 dots. At a speed of 12 wpm (UK test value) we have 5 dots per second, requiring a minimum bandwidth of 10 Hz for an am carrier (5 Hz for PSK) when using a brick wall filter and loads of ringing, or about double the bandwidth with a nice ring free response.

It seems if we were to use PSK rather than AM for CW we would gain 3 dB! The PA must operate at 100% duty cycle but at least you can run it in class E. However if you try and use a 20 Hz filter (or even 100Hz) for CW reception you notice a few things, one is that stations drift quite a bit and another is that stations rarely reply to calls within 20 Hz of your transmit frequency. There is also quite a bit of phase noise close to the carrier, especially with synthesised rigs which will reduce the signal to noise ratio.

For modes like Aurora and EME, the dispersion of the signal and doppler will make the filter un-useable. I would expect the limit on receiver bandwidth with DSP filters is more to do with the received signal characteristics than ringing.

Mike

Date: 27 Jan 1994 16:32:25 GMT

From: news.cstar.andersen.com!news.acns.nwu.edu!casbah.acns.nwu.edu!
rdewan@uunet.uu.net
Subject: CW filters and DSP-9
To: info-hams@ucsd.edu

In article <CK95xn.L1H@srgenprp.sr.hp.com>, Alan Bloom <alanb@sri.hp.com> wrote:
>Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:

>
>..
>: Each dot is encoded by an dot time length on and a dot time length off, i.e., a
>: cycle of twice the dot length. This is like multiplying a 50Hz square wave
>: with a 750 Hz tone. To maintain some semblance of square shape,
>: one would want to include the fundamental and at least the third harmonic.
>: This results in a minimum bandwidth of 150Hz. ...
>
>It's actually twice that, since the modulated 750 Hz tone has two sidebands.
>
>AL N1AL
>

Yes. It will be just like 100% amplitude modulation of 750Hz carrier with a 50Hz square tone. Thanks for correcting me. I had lost sight of the carrier. I was thinking of a DC square wave. Again, assuming that the third harmonic is relevant for no ringing in the output, the minimum bandwidth is 60Hz (for 20wpm). This is for no ringing in the output.

If one just considers the ability to copy a signal and accept ringing provided that it permits copying of the signal, then the minimum would drop. I have copied 20wpm signals while using a 30Hz bandwidth FIR filter in the W9GR unit. There was lots of ringing but I could still copy. The ringing could have been from insufficient bandwidth or pinking of the noise by the narrow filter.

It may be that the fundamental is enough for copying but that more bandwidth is needed to curtail ringing.

Rajiv
aa9ch
rdewan@nwu.edu

Date: 29 Jan 94 23:05:14 GMT

From: news-mail-gateway@ucsd.edu

Subject: FCC: Whats taking so long????
To: info-hams@ucsd.edu

>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.... Does anyone know
>--
>Larry.....
>haga@zach.fit.edu
 ^^^^^^^^^^^^^ *!*

what the..?! did you take your test on-campus, larry, or some place else?
when i get home (only 2 blocks from the FIT campus), i'll dig through stuff
and see what i know...the FCC tape recording is saying 12 weeks at the
outside.

if you did take the test there at fit (November 20), call me -- 724-6183.
with a 10 week cycle it could be next week to almost the end of February (and
hamdom begins to sound like a Cap'n Crunch at the Campgrounds commercial
again).

SCATG needs some new contacts there on campus with the radio club now that
eric was graduated and brian apparently didn't come back (and that means we
need to change the sign in the window of WB4ABK again...)...and i see R. H.
infrequently at best. KI4TG and KB4KQF are both out of the FIT loop as well.

73,

bill wb9ivr

Date: Fri, 28 Jan 1994 14:57:58 GMT
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!europa.eng.gtefsd.com!
uhog.mit.edu!news.mtholyoke.edu!world!dts@network.ucsd.edu
Subject: FCC form 610-V
To: info-hams@ucsd.edu

In article <2i9483\$n3c@cronkite.nersc.gov> Greg@epitome.er.doe.gov (Greg
Chartrand) writes:

>In the FCC announcement regarding vanity callsigns, they stated that
>every application for a specific callsign would have to be made on a
>form 610-V. I called the FCC in Washington and they said no such form
>exists. Knowing our government, it probably will take a year or two to
>design one, and another year or two to have it approved and printed in
>quantity.

>
>Does a form 610-V already exist in some dusty government warehouse?
>
>Greg

>WA9EYY/3

You might want to wait until the "vanity" call sign program is actually adopted. So far, they've just put out a notice of PROPOSED rulemaking. Now is the time for comments, etc. The rule must go through a review process with public comment before it can be enacted.

— —

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

Date: Fri, 28 Jan 1994 14:50:16 GMT
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!cs.umd.edu!ra!usenet@network.ucsd.edu
Subject: FCC form 610-V
To: info-hams@ucsd.edu

In article <2i9483\$n3c@cronkite.nersc.gov> Greg@epitome.er.doe.gov (Greg Chartrand) writes:

> In the FCC announcement regarding vanity callsigns, they stated that
> every application for a specific callsign would have to be made on a
> form 610-V.
>
> [the rest deleted]

So what's all this stuff about vanity callsigns? Is it now, or will it be possible in the future to choose your own callsign, assuming, of course, that someone else doesn't already have it? (I wouldn't mind getting W4DMD.) I've been marginally active for the past four years, so I'm not familiar on the latest changes to the rules and regulations.

BTW, in the latest issue of QST I noticed that most of the two by three amateur callsigns (technician/general) have been issued. I assume that the FCC is now issuing novice callsigns to new tech/tech+/general licensees. Is this true? In light of this, is there any serious talk about reissuing callsigns from expired licenses?

- Dave

—

David M. Drumheller, KA3QBQ phone: (202) 767-3524
Acoustics Division, Code 7140 fax: (202) 404-7732
Naval Research Laboratory
Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

Date: 27 Jan 1994 11:56:15 -0500
From: sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!udel!
news.sprintlink.net!news.clark.net!news.clark.net!not-for-mail@network.ucsd.edu
Subject: htx-202 or dj-162 ?
To: info-hams@ucsd.edu

In article <ah301-260194121225@129.228.248.39>,
Jerry Sy <ah301@yfn.ysu.edu> wrote:
>I have pretty much narrowed down my choice to these two 2m ht's.

>I'd like to get comments and opinions from people in the net who
>have actually used both.
>currently, I am leaning towards the dj-162 because of its wide
>receive.

The HTX202 is a good radio. It comes with the CTCSS, DTMF squelch, and
it can store telephone numbers. It has 14 memories, I think.

Matt Roberts N3GZM

Date: 28 Jan 1994 01:04:09 GMT
From: caen!usenet.cis.ufl.edu!eng.ufl.edu!saimiri.primate.wisc.edu!sdd.hp.com!
vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!udel!
news.sprintlink.net!news.clark.@@envoy.wl.com
Subject: Is portable radio use possible in remote wilderness areas?
To: info-hams@ucsd.edu

Matthew Harrington (ph600fgr@sdcc14.ucsd.edu) wrote:
: I do much backpacking, and increasingly I go alone. I'm thinking
: about the possibility of bringing a communications radio with
: me. Do these things have a large enough range to work out in
: the wilderness? I typically find myself only in California.

: What's the cost involved, and how big are the radios?

You can usually "work out in the wilderness", but your question is
rather vague. Are you a ham? Do you want two-way communications?
Do you want world-wide communications or just local capability for
emergencies? If we had a clue, we could help you! ;-)

Date: 27 Jan 1994 16:41:33 GMT
From: sdd.hp.com!col.hp.com!bobw@network.ucsd.edu

Subject: Is there a faq list for GMRS?
To: info-hams@ucsd.edu

Frank J. Reda (reda@gandalf.rutgers.edu) wrote:
: Does anyone know where I could get more info on GMRS (general mobile
: radio service).

: Specifically, how to apply for a license, and is there a test involved?

: TIA,
: FRank

: ----
: Frank J. Reda, Assistant Director, Rutgers University Computing Services
: reda@gandalf.rutgers.edu

Check the rec.radio.cb FAQ.

I know, its not really cb, but it used to be.

Bob

Bob Witte / HP PMO (Colo Springs) / bobw@col.hp.com / KB0CY / (719) 590-3230

Date: Thu, 27 Jan 1994 17:05:01 GMT
From: sdd.hp.com!cs.utexas.edu!swrinde!elroy.jpl.nasa.gov!lll-winken.llnl.gov!
taurus.cs.nps.navy.mil!news@network.ucsd.edu
Subject: Need info on CCW
To: info-hams@ucsd.edu

In <SPEMG1.6.000A3618@cf.ac.uk>, SPEMG1@cf.ac.uk writes:
>I need info on Coherent CW (Rigs, Kits, Books etc.). Can anybody point me to
>the right direction please

G3IRM publishes the "Coherent CW Newsletter"; the latest issue is #25,
January 1994. He asks 2 PS for a year's subscription, and I imagine
he'd be an excellent source of additional information.

Peter Lumb, G3IRM
2 Briarwood Avenue
Bury St. Edmunds
Suffolk IP33 3QF

P.J. Rovero Internet: rovero@oc.nps.navy.mil
Code OC/Rv Packet: kk1d@k6ly
Naval Postgraduate School

Monterey, CA 93943

Date: Fri, 28 Jan 1994 11:48:53 GMT
From: usc!sdd.hp.com!apollo.hp.com!hpwin052!hpqmoea!dstock@network.ucsd.edu
Subject: Of Wouff Hongs and Royal Rites
To: info-hams@ucsd.edu

Jeffrey Wittich (jwittich@b4pph107.bn.ca) wrote:
: Hi, everybody. Well, its about spring, and that means we are
: getting ready for the local HamFest round here. I'm looking
: at the hamfest flyer, and one on the events listed is
: The Royal Order of Whoff Hong Induction. Well ya see, I'm kind
: of a new guy, and dunno what that's all about.

There is some confusion between the induction rite into the order
(said to be not too bad) and the Wouff-Hongg itself (said to be worse
than can be imagined)

If the latter, then the answers would be:

: 1. Is it something that the OFs will enjoy at us new guys expense?

Absolutely not. some would be having painful memories, the rest
would be having squeamishness attacks.

: 2. Is it an event that I would prefer no one had a camera at?

Yes. Even newsteams understand that any videotape would be
un-broadcastable. Tabloid journalists would similarly recognise it as
unacceptable even in their publications. Private photography is the
risk.

: 3. Would I be any less likely to get home that night than any
: other night?

Not just one night.

: 4. Will my health insurance cover anything that's likely to happen?

Irrelevant.. you would not dare claim.

: 5. Is there a potential for any embarrassment to any involved?

There would be too much distraction for embarrassment

* and it sure as hell doesn't speak for me!! *

-----*

Date: Fri, 28 Jan 1994 04:29:34 GMT
From: library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!sdd.hp.com!hpscit.sc.hp.com!
hplextra!hpfcso!hplvec!tcline@network.ucsd.edu
Subject: QST Article on Balloon Tracking using GPS Rcvr
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, hpeach@ca.uky.edu (Harold G. Peach Jr.) writes:
> Several months ago there was an article in QST about a guy that was
> tracking balloons using data from a GPS receiver, transmitted back to a
> ground station. He had written a spreadsheet in MS-Excel that would
> graph the balloon's flight path based on the points reported back by the
> GPS receiver. Does anyone have a copy of his spreadsheet or the
> algorithm he used? Please e-mail me at <hpeach@ca.uky.edu>.
>
> ---
> Harold
> hpeach@ca.uky.edu

Hi Harold,

The article was "Persistence Gets the Derelict" (QST, August 1993, p35) about our Edge of Space Sciences (EOSS) sixth balloon flight that we launched near Denver but which took off for Nebraska.

Paul Ternlund, WB3JZV created the Macintosh PowerBook Excel program to track the balloon's position as determined by the radio direction-finding tracking team. Paul's phone is 303-699-7479 and his email address is paul.ternlund@filebank.com .

That was EOSS-6 in May 1992, when we were experimenting with VOR reception on the balloon. Since then we have had several successful Loran-C balloon payloads with AX.25 packet telemetry and sponsored a National Balloon Symposium. We hope our next EOSS-15 in February will provide our first onboard GPS receiver AX.25 telemetry.

73

Ted Cline, N0RQV
ted_cline@hpicla.lvld.hp.com

Home: 3202 Spruce Drive
Fort Collins, CO 80526-1044 USA

(303) 493-1136

Date: 23 Jan 94 09:24:09 GMT
From: netcomsv!netcomsv!lavc!steven.rosenberg@decwrl.dec.com
Subject: RAMSEY FX TRANSCEIVER
To: info-hams@ucsd.edu

jeffl@comix.UUCP (Jeff Liebermann) writes:

> 6. The Ramsey kits are not state of the art, high quality,
> or a fabulous bargain. They are adequate for the purpose intended:
> a kit for those that still believe that radio construction is a
> part of ham radio and that believe they may profit from the
> experience. If the lack of accessories is offensive, please
> consider that anyone who builds their own equipment, is quite
> likely to have a supply of suitable microphones, speakers, and
> boxes.

I didn't say that Ramsay should include microphones, speakers or boxes,
just that pegging the kits as existing ONLY for the thrill of
construction and not to produce a useable radio.

If this is the case, shouldn't Ramsay's ads lead off with the following
words in big letters:

DO NOT USE THIS AS YOUR PRIMARY RADIO. ONLY PURCHASE THIS KIT IF YOU
PRIZE THE THRILL OF CONSTRUCTION FAR ABOVE ANY PRACTICAL USE OF SAID
EQUIPMENT.

On the contrary, I think Ramsay is trying to push these kits to people
who "can't afford" a pre-made Japanese radio. And that is a travesty.

Steven Rosenberg, KC6FYL

Date: Thu, 27 Jan 1994 22:53:58 GMT
From: caen!usenet.cis.ufl.edu!eng.ufl.edu!saimiri.primate.wisc.edu!sdd.hp.com!
vixen.cso.uiuc.edu!howland.reston.ans.net!europa.eng.gtefsd.com!emory!
wa4mei.ping.com!ke4zv!gary@envoy.wl.com
Subject: Sideband Technology Inc.
To: info-hams@ucsd.edu

In article <CKAu6K.4Hy@freenet.carleton.ca> ab376@FreeNet.Carleton.CA (Mike
Ligeza) writes:

>

>Recently liberated from our corp. lab, what appears to be a VHF
>Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
>N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
>Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight forward
>VHF rig from the Main board, but underneath is another board chock full of
>chips in what appears to be the audio section.
>

>Anybody any info on these rigs? Would love a manual or even a schematic.

This sounds like one of the test rigs for Amplitude Compandored Single SideBand. This is the mode UPS was going to use in taking over the 220-222 MHz spectrum before they decided to go with cellular phone, but after we lost the spectrum.

It's basically a single sideband radio with the audio compandored with a 2:1 compandor like dbx, and with a pilot tone injected for compandor tracking and AFC. It was supposed to give FM convenience in an SSB bandwidth. If you strip out the compandor and the pilot tone generator, you can move it to 2 meters where it can serve as a 4 channel SSB rig. Probably not worth the effort though.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Thu, 27 Jan 1994 16:35:55 GMT
From: sdd.hp.com!vixen.cso.uiuc.edu!milo.mcs.anl.gov!ANLVM.CTD.ANL.GOV!
B10990@network.ucsd.edu
Subject: Where is FAQ on EMF?
To: info-hams@ucsd.edu

In article <9401251935.AA14487@metro.mccneb.edu>
pmarsh@metro.mccneb.EDU (Paul Marsh) writes:

>
>A friend in Seattle is looking for info on electro-magnetic fields (EMF).
>Gary Coffman mentioned a FAQ dealing with the subject. Could Gary or
>someone please advice where I might ftp a copy? If anyone knows of other
>relevant materials, bibliographies, etc., could you please send them to
>me? (Please send direct -- avoid clogging the bandwidth.)
>
>Thanks. Paul Marsh N0ZAU pmarsh@metro.mccneb.edu
=====

I have the FAQ and it is EXCELLENT! Available by anonymous ftp from rtfm.mit.edu in /pub/usenet-by-group/news.answers/powerlines-cancer-FAQ

Gary E. Myers CIH BITnet: B10990@ANLVM
Environment, Safety and Health Division Internet: GEMYERS@ANL.GOV
Bldg. 200 Phone: (708)252-5642
Argonne National Laboratory FAX: (708)252-7608
Argonne IL 60439 AX.25: K9CZB@W9QVE.IL.USA.NA

Date: 27 Jan 1994 01:06:59 GMT
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!cs.utexas.edu!asuvox!
ennews!mcdphx!schbbs!mothost!delphinium.cig.mot.com!cherokee3!
clinehe@network.ucsd.edu
To: info-hams@ucsd.edu

References <1994Jan24.190117.4386@ncsu.edu>, <CK5w6v.1Ey@ucdavis.edu>, <5KJHjGG8ynrC053yn@dorsai.dorsai.org>ineh
Reply-To : clinehe@rtsg.mot.com
Subject : Re: WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

In article <5KJHjGG8ynrC053yn@dorsai.dorsai.org>, bigsteve@dorsai.dorsai.org (Steve Coletti) writes:
|> |> The show is anything but religion, you see WWCR also means World Wide
|> Conspiracy Radio. Anyone want to take a vote on starting an
|> alt.radio.conspiracy newsgroup for WWCR listeners? C'mon all you Tom
|> Valentine and Pastor Pete fans, this is for you.

Don't forget the Hour of the Time with William Cooper!
They are usually entertaining and address subjects you won't here elsewhere.
How about alt.new world order?

End of Info-Hams Digest V94 #88

